

IN THE DRAWINGS

Applicants propose to label the blocks in Figs. 1-3 of the drawings in accordance with the accompanying ANNOTATED SHEETS SHOWING CHANGES.

Enclosed herewith are REPLACEMENT SHEETS in which the above changes are incorporated.

REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, claims 11 and 12 have been cancelled, while the claims have been amended for clarity. In addition, new claim 13 has been added and claims an additional feature of the invention.

Applicants believe that the above changes answer the Examiner's 35 U.S.C. 101 and 112, paragraph 2, rejections of the claims, and respectfully request withdrawal thereof.

The Examiner has rejected claims 1-12 under 35 U.S.C. 103(b) as being anticipated by U.S. Patent 5,918,223 to Blum et al. The Examiner has further rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over Blum et al. in view of the Sheirer et al. article "Construction and Evaluation of a Robust Multifeature Speech/Music Discriminator", Proceedings of the 1997 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP '97), Vol 2, p1131-1134).

The Blum et al. patent discloses a method and article of manufacture for content-based analysis, storage, retrieval, and segmentation of audio information.

The Examiner has indicated that Blum et al. discloses "performing a frequency analysis on a set of values of said audio feature at different time instances (Col 15 lines 43-44, bass spectrum, which represents the bass trajectory at different time instances, is subjected to an FFT)".

As noted in MPEP § 2131, it is well-founded that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Independent claims 1 and 8 include the limitation "performing a frequency analysis on a set of values of said extracted predetermined audio feature at different time instances resulting in a power spectrum of said extracted predetermined audio feature". Applicants submit that this is neither disclosed nor suggested by Blum et al. In particular, Blum et al. states, at col. 15, lines 42-49:

"If the rhythm option is chosen, an FFT is performed on the bass trajectory. This yields a spectrum whose x-axis measures distances in time, and whose peaks indicate the most frequent separation in time between bass notes. For example, if the bass drum usually plays on the first beat of the measure, the time separation corresponding to one measure will show up as a peak."

It should be apparent from the above that the frequency analysis done by Blum et al. does not result in a power spectrum of the extracted predetermined audio feature.

Further, since Blum et al. does not disclose or suggest "a power spectrum of the extracted predetermined audio feature", then surely, Blum et al. neither discloses nor suggests "deriving at

least one further audio feature representing a temporal behavior of said extracted predetermined audio feature by parameterizing said power spectrum".

The Scheirer et al. article, as noted by the Examiner, discloses "an audio classifier in which the 4Hz modulation frequency energy of the signal is analyzed (p1131 Section 2). It was well known to those skilled in the art at the time of the invention that speech tends to have more modulation energy at 4Hz than music does (See Scheirer p1131 Section 2)." (Applicants note that the correct page number in the Scheirer et al. article is 1331).

The Examiner then indicates that it would have been obvious to try a 3-15Hz modulation frequency parameter as a feature in Blum's invention.

Applicants submit, however, that Scheirer et al. does not supply that which is missing from Blum et al., i.e., "performing a frequency analysis on a set of values of said extracted predetermined audio feature at different time instances resulting in a power spectrum of said extracted predetermined audio feature" and "deriving at least one further audio feature representing a temporal behavior of said extracted predetermined audio feature by parameterizing said power spectrum".

In view of the above, Applicants believe that the subject invention, as claimed, is neither anticipated nor rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believes that this application, containing claims 1-10 and 13, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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ANNOTATED SHEET SHOWING CHANGES

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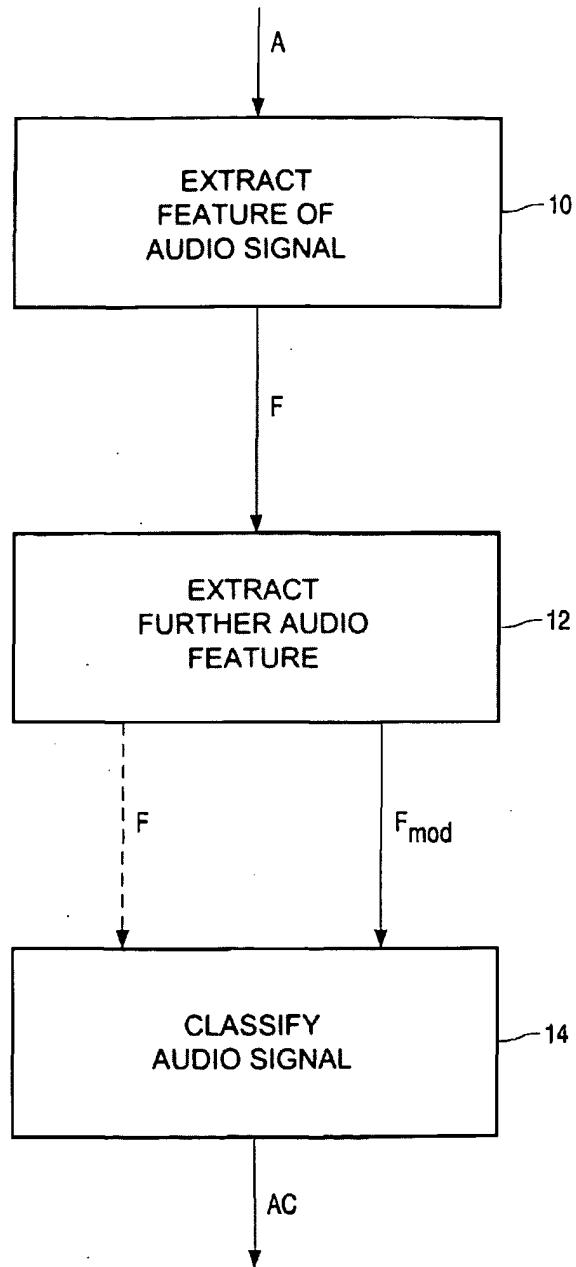


FIG.1

ANNOTATED SHEET SHOWING CHANGES

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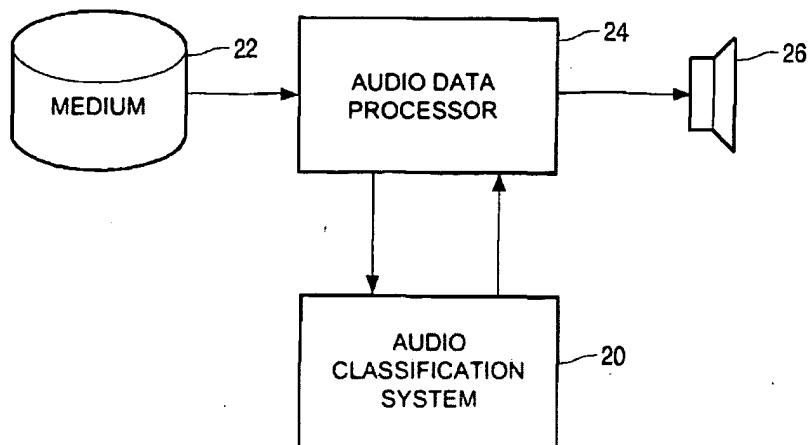


FIG.2

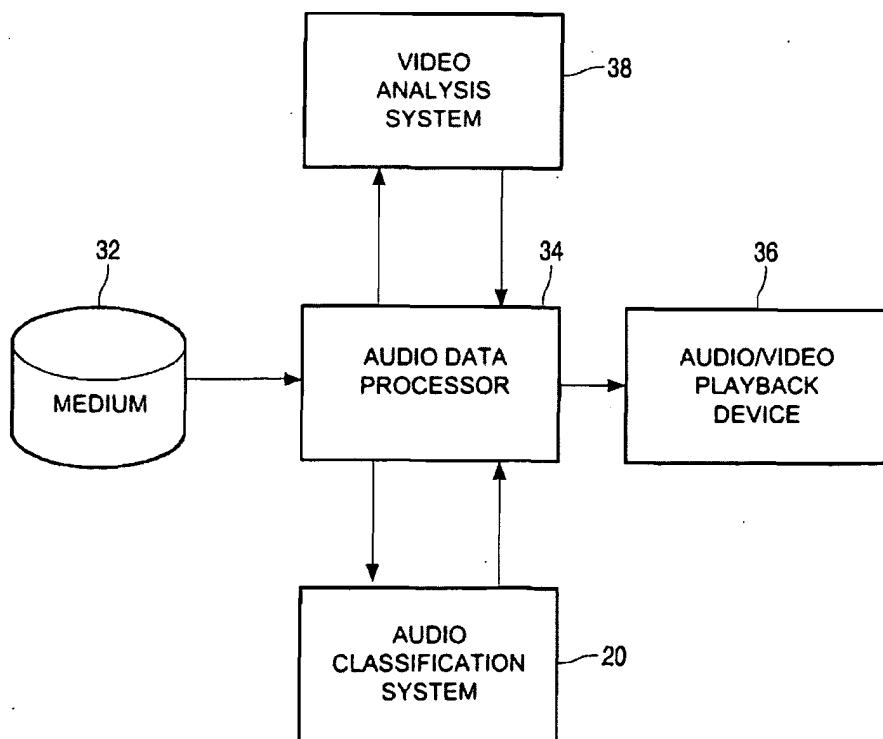


FIG.3